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09/829,239	04/09/2001	Takashi Kumagai	7217/64312	7592

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EXAMINER

PHAM, HUNG Q

ART UNIT	PAPER NUMBER
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2162

DATE MAILED: 11/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/829,239

Applicant(s)

KUMAGAI ET AL.

Examiner

HUNG Q PHAM

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 August 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-6,8-15,18-28,30,32,33,36,37,39,40,43-46 and 48-52 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 30,32 and 33 is/are allowed.
- 6) ☒ Claim(s) 1,3,5,6,8,10-15,17-28,36,37,39,40,43-46 and 48-52 is/are rejected.
- 7) ☒ Claim(s) 4,9 and 18 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 08/30/2004 has been entered.

Response to Arguments

2. Applicant's arguments with respect to the rejection of claims 30 and 36 under 35 U.S.C § 12, first paragraph, filed on 07/09/2004 have been fully considered and are persuasive. The rejection of claims 30 and 36 has been withdrawn.

3. Applicant's arguments with respect to claims 1, 3-6, 8-15, 18-28, 30, 32-33, 43-46 and 48-52 have been considered but are moot in view of the new ground(s) of rejection.

4. Applicant's arguments with respect to claims 36 have been fully considered but they are not persuasive.

As argued by applicant:

It is respectfully submitted, however, that Wiser et al. does not disclose storage control means for placing a content ID stored in the second storage means into purchase information

managed for each terminal apparatus and stored in second storage means after content information associated with the content ID is purchased in response to a request from said terminal apparatus as recited in amended independent claim 36.

Examiner respectfully traverses because of the following reasons:

As shown in FIG. 1B, the music distribution center as *a distribution apparatus including second storage means*, which is transaction database 130, media info. database and master media files *for storing plurality of pieces of content information*. As shown in FIG. 9a-b of Wiser is the process of purchasing a media data file. By clicking the buy it button, the button generates a URL including the media ID of the song to be purchased. The HTTP server forwards the purchase request to merchant server. Payment information is collected by the merchant server and the media ID is sent to the content manager 112 for verifying the availability status of the request media file (Col. 16, line 26-Col. 17, line 5). The content manager generates a media voucher that includes the media ID (Col. 15, lines 19-23). The content manager updates the transaction database to include a new entry with the data from the voucher (Col. 17, lines 35-37). As in FIG. 3 of Wiser is a media voucher with a unique voucher ID 302, and a media ID 304 that uniquely identifies the media data file 200. The voucher ID 302 limits the use of the media voucher 300 to a single purchase or preview transaction. The voucher further includes a receipt 306 and delivery server address 308 (Wiser, Col. 8, Lines 27-41). The media data file 200 is stored in the master media file system 120 (Col. 6, Lines 48-52). As seen, media file is represented by a media ID as *a content ID* and stored in master media file system 120 as *the second storage means* and placed into media voucher as *purchase information managed for each terminal apparatus and stored in the transaction*

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database as *second storage means after content information associated with the content ID is purchased in response to clicking the buy it button as a request from said terminal apparatus.*

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claim 1 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites the limitation *said user* in the technique of setting an amount of a fee by accounting setting means. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of

the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

8. Claims 1, 3, 8-10, 12, 14-15, 18, 22-25, 27, 43-46 and 49 are rejected under 35 U.S.C. 103(a) as being unpatentable over Crawford [USP 5,771,354] in view of Schneider [USP 6,594,675].

Regarding to claims 1 and 14, Crawford teaches an online service system. As shown in FIG. 5, the local disk drive of customer computer 50b is the *first storage means for storing a plurality of pieces of content information*, and the local disk drive of replica server computer 160 is the *second storage means for storing a plurality of pieces of content information*. The replica computer 160 may provide one or more "virtual" disk drives to customer computer 50, and the customer computer may provide one or more "virtual" disk drives to the replica computer. A virtual device is an arrangement that simulates or emulates a locally attached physical device. For example, a virtual disk drive can be an arrangement that "looks like" a physical disk drive. The virtual disk drives allow the customer computer 50 to access resources as if those resources were actually a physical disk device locally attached to the customer computer (Crawford, Col. 18, Lines 1-34). By using DOS command, processor flag, drive translation tables as *control means*,

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a user can *access content information stored in* customer computer as *first storage means* and replica server computer as *second storage means*, such as file copy, or file transfer (Crawford, Col. 20, Line 66-Col. 23, Line 67 and Col. 29, Lines 10-13) based on the file name as *a single set of management information for managing said content information stored in first storage means and second storage means*. Crawford system further comprises *a communication means for interconnecting said first storage means, said second storage means, and said control means for communication* (Crawford, Col. 17, Lines 29-46), and *accounting setting means for setting an amount of a fee to be imposed on a predetermined user in accordance with a capacity of use of said second storage means by said user* (Crawford, Col. 57, Line 59-Col. 58, Line 23). Crawford does not explicitly teach the claimed *single set of management information described with a logical address corresponding to said physical address*. Schneider teaches a file system, and further discloses that a hierarchical arrangement of directories with respect to a root directory, which is the root node of the hierarchical file structure, defines the logical address of files in the system (Schneider, Col. 3, Lines 32-43). A physical file system typically manages permanent storage of data on a storage device. A file request would first be handled by the logical file system, which would then build a request to access the data to pass to the physical file system. The physical file system then proceeds to access the requested data directly from the storage device using the address information of physical data on the storage device to directly address the data on the storage device (Schneider, Col. 3, Line 64-Col. 4, Line 6). As seen, in response to a file request, the requested pathname and file name will define the *logical address*, the requested data stored in the storage

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device is accessed by using the *corresponding* address information of physical data or *physical address*, and in light of Schneider technique, the pathname and file name that specifies a file in the COPY command will define the logical address, and obviously, *the content information stored at a predetermined physical address of* (A), (B), and (C) drives of customer computer or replica server computer as *each of said first storage means and said second storage means* is *accessed based on* the requested pathname and file name as *a single set of management information described with logical address corresponding to said physical address*. Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to use the logical address for accessing a file in a file system.

Regarding to claim 15, Crawford teaches an online service system. As shown in FIG. 5 is a customer computer 50 as *an external apparatus*, the host computer 104 as *a distribution apparatus*. Host computer 104 may provide one or more virtual disk drives to customer computer 50 (Crawford, Col. 18, Lines 1-3). Host computer 104 may have several physical disk drives 116, and host-provided virtual disks are actually objects that are physically stored on host disk 116. Through software executed by host computer 104 and cooperating software executing on customer computer 50, these virtual disks can be attached to customer computer 50, and appear to those computers 50 as additional, locally attached physical drives. In other words, the operating systems of computers 50 can access these virtual disks in the same way they access a locally attached physical disk drive. Thus, customer computer 50 operating system can write to

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and read from a virtual disk in essentially the same manner that it can write to and read from its own local hard disk 64 (Crawford, Col. 18, Lines 35-61). Referring to FIG. 5, host computer physical disk drive 116a stores information associated with two different virtual disks, I:Drive and J:Drive, and host computer physical disk drive 116b stores information associated with a further virtual disk, K:Drive (Crawford, Col. 22, Lines 51-61). As seen, the physical disk drive of host 104 as the *storage means for storing a plurality of pieces of content information*. The Crawford system further comprises a *communication means for connecting said distribution apparatus for communication to* customer computer 50b as *an external apparatus* (Crawford, Col. 17, Lines 29-46), and *accounting setting means for setting an amount of a fee to be imposed on a user who requests use of said storage means from said external apparatus in response to a capacity of use of said storage means by said user* (Crawford, Col. 57, Line 59-Col. 58, Line 23). The online service system 100 can provide to customer computer 50 Anti-Viral Services by accessing anti-viral software stored on virtual disk. Anti-viral programs can be copied or executed directly (Crawford, Col. 14, Lines 36-44). As shown in FIG. 27 is the process of signing up by assigning a user ID and password to the new customer, and completing the customer control data 1002 and on-line service control data 501 as in FIG. 16A based upon the supplied information (Crawford, Col. 57, Lines 39-45). The user ID is used to provide access to on-line service programs stored on virtual disks (Crawford, Col. 29, Lines 10-13). As shown in FIG. 8B, a user may request to purchase a particular program or data. If the request is for a purchase, logging is performed with certain information, e.g., user, begin time, etc., and then the host computer 104 allocates the

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appropriate virtual disk containing the program or information to be purchased. Host computer 104 also allocates a destination device for receiving the purchased program or information. This destination device may be, for example, the local hard disk 64 within customer computer 50. The selected software is then copied to the destination device in order to complete the purchase (Crawford, Col. 30, Lines 23-36). As seen, in response to a request to purchase a particular program or data, user ID is produced, and virtual or logical disk address, such as I:Drive, J:Drive or K:Drive is allocated, wherein I:Drive, J:Drive or K:Drive is an address representative of a storage location of said content information stored in physical disks 116, and obviously, each I:Drive, J:Drive or K:Drive is corresponding to a physical address of physical disk 116. In different words, the technique as discussed indicates the claimed *control means for accessing said contents information stored in said storage means in response to a user request by a user for said external apparatus, wherein control means produces management information for each said user in response to access to said content information in accordance with said user request and stores said produces management information into said storage means, said management information including at least an ID of said user and an address representative of a storage location of said content information stored in said storage means*. Crawford does not explicitly teach *control means accesses said contents information stored at a predetermined physical address of said storage means based on said management information described with a logical address corresponding to said physical address*.

Schneider teaches a file system, and further discloses that a hierarchical arrangement of directories with respect to a root directory, which is the root node of the hierarchical

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file structure, defines the logical address of files in the system (Schneider, Col. 3, Lines 32-43). A physical file system typically manages permanent storage of data on a storage device. A file request would first be handled by the logical file system, which would then build a request to access the data to pass to the physical file system. The physical file system then proceeds to access the requested data directly from the storage device using the address information of physical data on the storage device to directly address the data on the storage device (Schneider, Col. 3, Line 64-Col. 4, Line 6). As seen, in response to a file request, the requested pathname and file name will define the *logical address*, or the *logical address* represents the requested pathname and file name, and the requested data stored in the storage device is accessed by using the *corresponding* address information of physical data or *physical address*. Referring back to Crawford reference, Crawford further discloses that when a command COPY A:.* C: is issued by the customer computer 50 with the processor flag set to "customer computer" and with drive translation off, the command is executed by copying from the customer's local floppy diskette drive (A) to the customer's hard drive (C). When the same command is issued by the customer computer 50 with drive translation on, it is translated into COPY J:.* L:. If this translated command is executed by the replica computer 160, which accesses the customer's floppy diskette drive and customer's hard drive as virtual drives J and L, it will copy from the customer's local floppy diskette drive (A) to the customer's hard drive (C), and achieving the same result without the user of customer computer 50 having to know or use the drive designators that the replica computer must use in order to access the customer computer drives as virtual drives

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(Crawford, Col. 22, Lines 34-50). As seen, in light of Schneider technique, the pathname and file name that specifies a file in the COPY command will define the logical address, and obviously, *the content information stored at a predetermined physical address of said storage means based on the requested pathname and file name as management information described with logical address corresponding to said physical address*. Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to use the logical address for accessing a file in a file system.

Regarding to claims 3 and 18, Crawford and Schneider teaches all the claimed subject matters as discussed in claims 1 and 15, Crawford further discloses *selection means for selecting at least one of said plurality of pieces of content information stored in said second storage means, wherein said control means controls so that one or more of said plurality of pieces of content information selected by said selection means may be copied or moved from said second storage means to said first storage means through said communication means* (Crawford, Col. 22, Lines 34-50).

Regarding to claims 8, 22 and 23, Crawford and Schneider teaches all the claim subject matters as discussed in claims 1, 15 and 22, Crawford further discloses a *setting means for setting said capacity of use for said second storage means, wherein said accounting setting means sets said amount of said fee to be imposed on said user in accordance with said*

capacity of use of said user set by said setting means (Crawford, Col. 57, Line 59-Col. 58, Line 23).

Regarding to claims 9 and 24, Crawford and Schneider teaches all the claim subject matters as discussed in claims 8 and 23, Crawford further discloses *setting means adaptively sets said capacity of use used by said user based on said management information for managing said second storage means, and said accounting setting means sets said amount of said fee to be imposed on said user in accordance with said capacity of use of said user set by said setting means* (Crawford, Col. 57, Line 59-Col. 58, Line 23).

Regarding to claims 10 and 25, Crawford and Schneider teaches all the claim subject matters as discussed in claims 1 and 22, Crawford further discloses *accounting setting means stores said amount of said fee to be imposed on said user in accordance with said capacity of use of said second storage means by said user in a database for each said user in said second storage means* (Crawford, Col. 59, Line 11-Col. 60, Line 9).

Regarding to claims 12 and 27, Crawford and Schneider teaches all the claim subject matters as discussed in claims 1 and 15, Crawford further discloses *authentication means for verifying access to said second storage means by said control means* (Crawford, Col. 28, Lines 37-51).

Regarding to claim 43, Crawford teaches an online service system. As shown in FIG. 5, customer computer as *a terminal apparatus*, replica server computer is *a distribution terminal apparatus*, and host computer is *a server apparatus* comprising *a first storage medium provided in said server apparatus for storing a plurality of pieces of content information, second storage medium provided in said distribution terminal apparatus for storing said plurality of pieces of content information, third storage medium provided in said terminal apparatus for storing a plurality of pieces of content information*. By using DOS command, processor flag, drive translation tables as *a controller for controlling access to any of said first, said second, and said third storage media with a drive translation table as single table of contents* (Crawford, Col. 20, Line 66-Col. 23, Line 67 and Col. 29, Lines 10-13). Crawford does not explicitly teach *management information for managing said content information stored in at least two of said first, said second, and said third storage media, and controller accesses said content information stored at a predetermined physical address of each of said first and said second storage media based on said management information described with a logical address corresponding to said physical address*.

Schneider teaches a file system, and further discloses that a hierarchical arrangement of directories with respect to a root directory, which is the root node of the hierarchical file structure, defines the logical address of files in the system (Schneider, Col. 3, Lines 32-43). A physical file system typically manages permanent storage of data on a storage device. A file request would first be handled by the logical file system, which would then build a request to access the data to pass to the physical file system. The physical file system then proceeds to access the requested data directly from the

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storage device using the address information of physical data on the storage device to directly address the data on the storage device (Schneider, Col. 3, Line 64-Col. 4, Line 6). As seen, in response to a file request, the requested pathname and file name will define the *logical address*, the requested data stored in the storage device is accessed by using the *corresponding* address information of physical data or *physical address*, and in light of Schneider technique, the pathname and file name that specifies a file in the COPY command is *management information for managing said content information stored in at least two of said first, said second, and said third storage media*, and the pathname and file name will define the *logical address*, and obviously, *the content information stored at a predetermined physical address of (D), (E), and (F) drives of replica server computer and (I), (J), and (K) drives of host computer as each of said first and said second storage media is accessed based on management information described with logical address* defined by the pathname and file name *corresponding to said physical address*. Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to use the pathname and file name to define the logical address of a file in order to access a file in a file system.

Regarding to claim 44, Crawford and Schneider teaches all the claimed subject matters as discussed in claim, Crawford further discloses *management information includes first management information for managing said content information stored in said first storage medium and said second storage medium with a first table of contents, and second management information for managing said content information stored said second*

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storage medium and said third storage medium with a second table of contents (Crawford, Col. 22).

Regarding to claim 45, Crawford and Schneider teaches all the claimed subject matters as discussed in claim 43, Crawford further discloses *management information includes shared management information for managing said content information stored in said first, said second, and said third storage media with said table of contents* (Crawford, FIG. 5).

Regarding to claim 46, Crawford and Schneider teaches all the claim subject matters as discussed in claim 44, Crawford further discloses *first management information is stored in said storage means of at least one of said server apparatus and said distribution terminal apparatus, and said second management information is stored in said storage means of at least one of said distribution terminal apparatus and said terminal apparatus* (Crawford, FIG. 5).

Regarding to claim 49, Crawford and Schneider teaches all the claim subject matters as discussed in claim 43, Crawford further discloses *first storage medium is a hard disk and said third storage medium is a semiconductor memory* (Crawford, FIG. 5).

9. **Claims 5 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Crawford [USP 5,771,354] in view of Schneider [USP 6,594,675], Srinivasan [USP 6,460,076 B1] and Omura et al. [USP 6,430,620 B1].**

Regarding to claims 5 and 20, Crawford and Schneider teaches all the claimed subject matters as discussed in claims 3 and 18, but does not teach *an erasure means for erasing one or more of said plurality of pieces of content information stored in said first storage means, wherein where a contents ID of said content information erased by said erasure means is managed with said management information, where said information corresponding to said contents ID is again transferred from said second storage means to first storage means by said control means said accounting setting means does not set said amount of said fee to be imposed on said user who has issued a request for said transfer*. Srinivasan teaches a system for downloading and recording multimedia files over a data network, Srinivasan further discloses an *erasure means for erasing one or more of said plurality of pieces of content information stored in said first storage means* when the file has not been successfully transferred, and *accounting setting means does not set said amount of said fee to be imposed on said user who has issued a request for said transfer* (Srinivasan, FIG. 3). However, if the file has not been successfully transferred, the process will be ended after deleting file from the memory. Omura teaches a system for locating and retransferring lost data comprises *contents ID form second storage means to first storage means* (Omura, FIG. 6 (c)-6(d), Col. 6 and Cols. 9-10). Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to modify

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the Crawford and Schneider system by including an erasure means as taught by Srinivasan and the technique of retransferring of lost data as taught by Omura in order to compensate for the loss in case of occurrence of any data loss.

10. Claims 6 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Crawford [USP 5,771,354] in view of Schneider [USP 6,594,675], Srinivasan [USP 6,460,076 B1], Omura et al. [USP 6,430,620 B1] and Kenner et al. [USP 6,154,744].

Regarding to claims 6 and 21, Crawford and Schneider teaches all the claimed subject matters as discussed in claims 3 and 18, but fails to teach an *erasure means for erasing at least one of the plurality of pieces of contents information stored in said first storage means, wherein where a contents ID of the contents information erased by said erasure means is managed with the management information, when said contents information corresponding to the contents ID is again transferred from said second storage means to said first storage means again by said control means, said accounting setting means set a smaller amount of said fee to be imposed on said user who has issued a request for said transfer than a normal fee*. Srinivasan teaches a system for downloading and recording multimedia files over a data network, Srinivasan further discloses an *erasure means for erasing one or more of said plurality of pieces of content information stored in said first storage means* when the file has not been successfully transferred. However, if the file has not been successfully transferred, the process will be ended after deleting file from the memory

(Srinivasan, FIG. 3). Omura teaches a system for locating and retransferring lost data comprises *a contents ID of the contents information is managed with the management information, contents information corresponding to said contents ID is again transferred from second storage means to first storage means* (Omura, FIG. 6 (c)-6(d), Col. 6 and Cols. 9-10). Kenner teaches a system for storing and retrieving video data at distributed sites. Kenner further discloses the system allowing discounts or credits to be issued if downloads are found to be difficult or slow (Kenner, Col. 16, lines 16-27). Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to modify the Crawford and Schneider system by including an erasure means as taught by Srinivasan and the technique of retransferring contents information corresponding to contents ID and imposing on a user a smaller amount than a normal fee as taught by Omura and Kenner in order to compensate for the loss in case of occurrence of any data loss.

11. Claims 11 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Crawford [USP 5,771,354] in view of Schneider [USP 6,594,675] and Srinivasan [USP 6,460,076 B1].

Regarding to claims 11 and 26, Crawford and Schneider teaches all the claim subject matters as discussed in claims 10 and 25, Crawford further discloses *control means controls such that said imposed amount of said fee stored for each said user in said database* (Crawford, Col. 59, Line 11-Col. 60, Line 9) but does not explicitly teach *user ID*

of said user are transmitted to an external settlement center. Srinivasan teaches a system for downloading and recording multimedia files over a data network, Srinivasan further discloses *user ID of said user are transmitted to an external settlement center* (FIG. 1, Credit Authorization). Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to verify a user in order to prevent credit card fraud.

12. Claims 13 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Crawford [USP 5,771,354] in view of Schneider [USP 6,594,675] and Wiser et al. [USP 6,385,596 B1].

Regarding to claims 13 and 28, Crawford and Schneider teaches all the claimed subject matters as discussed in claims 12 and 27, but fails to disclose *second storage means stores a plurality of said user IDs, and said authentication means compares said user ID with which said second storage means is accessed and said plurality of said user IDs to authenticate said user who has accessed said second storage means*. Wiser teaches an online music distribution system, and further discloses *second storage means stores a plurality of said user IDs, and said authentication means compares said user ID with which said second storage means is accessed and said plurality of said user IDs to authenticate said user who has accessed said second storage means* (Wiser, Col. 11, lines 25-38 and Col. 14, lines 33-35). Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to modify the Crawford and Schneider system by including the

technique of comparing user ID to authenticate a user in order to protect the downloaded information to avoid unauthorized copying.

13. Claims 36-37 and 39-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wiser et al. [USP 6,385,596 B1].

Regarding to claim 36, Wiser teaches a secure online music distribution system that provides consumers with flexibility and ease of use in the selection, previewing, downloading, and transporting of audio and other digital media over the Internet, and that provides for security of the media throughout the distribution system. As shown in FIG. 1 is a system for the secure distribution of music and related media over the Internet. The system includes a music distribution center 124 as *a distribution apparatus*, which operates with any number of client systems 126 as *a terminal apparatus*. The content manager 112 of the music distribution center 124 maintains a *second storage means* includes a media information database 106, a master media file 120, and a transaction database 130. As shown in FIG. 2, is an illustration of a media data file. The media data files 200 as *a plurality of pieces of content information are stored in second storage means* (Col. 5, lines 43-65). FIG. 2 is a client system has two basic components, a media player and a web browser. The media player is the mechanism by which the consumer digitally records purchased media data files to a further external memory, such as a CD-Recordable, CD-RW, Mini-Disc, flash memory. The media player provides user interface controls for viewing lists of purchased and stored media data

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files as *a plurality of pieces of said content information* (Col. 10, lines 1-13). In other word, a client system as a terminal apparatus that has media player as a *first storage means for storing a plurality of pieces of said content information*. As disclosed by Wiser, the music distribution system 124 communicates with the various other components such as the client systems 126 over a public communication network, preferably the Internet, using conventional TCP-IP communication protocols for insecure channels, and a secure protocol over TCP, such as Netscape Communication Inc.'s Secure Sockets Layer v. 3 (SSL), and these communications indicate *communication means for interconnecting said terminal apparatus and said distribution apparatus* (Col. 5, line 43-Col. 7, line 16). As shown in FIG. 9a-b of Wiser is the process of purchasing a media data file. By clicking the buy it button, the button generates a URL including the media ID of the song to be purchased. The HTTP server forwards the purchase request to merchant server. Payment information is collected by the merchant server and the media ID is sent to the content manager 112 for verifying the availability status of the request media file (Col. 16, line 26-Col. 17, line 5). The content manager generates a media voucher that includes the media ID (Col. 15, lines 19-23). The content manager updates the transaction database to include a new entry with the data from the voucher (Col. 17, lines 35-37). As in FIG. 3 of Wiser is a media voucher with a unique voucher ID 302, and a media ID 304 that uniquely identifies the media data file 200. The voucher ID 302 limits the use of the media voucher 300 to a single purchase or preview transaction. The voucher further includes a receipt 306 and delivery server address 308 (Wiser, Col. 8, Lines 27-41). The media data file 200 is stored in the master media file system 120

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(Col. 6, Lines 48-52). As seen, media file is represented by a media ID as *a content ID* and stored in master media file system 120 as *the second storage means* and placed into media voucher as *purchase information managed for each terminal apparatus* and stored in the transaction database as *second storage means after content information associated with the content ID is purchased in response to clicking the buy it button as a request from said terminal apparatus*. In short, the technique as discussed indicates *storage control means for placing a content ID stored in said second storage means into purchase information managed for each said terminal apparatus and stored in said second storage means after content information associated with said content ID is purchased in response to a request from said terminal apparatus*. The media voucher includes a receipt token, which is returned in the media voucher to the media player for initiating download of the requested media data file from a delivery server (Col. 17, lines 22-31). A receipt token is a strong random number generated by the content manager 112 which is used to create a message authentication code (MAC) of the voucher ID and consumer certificate to bind the delivery of the media data to the purchase transaction. Preferably, the MAC is a keyed message authentication code as defined in Internet RFC 2104 (Col. 8, lines 32-41). As seen, the media voucher with a receipt token is access control means for controlling access to the media data file corresponding to media ID stored in storage means in response to a purchasing. In other words, the technique as discussed indicates *access control means for controlling access to said contents information corresponding to said content ID stored in said second storage means in response to said purchase information*. When a voucher packet is issued for a reservation, it is added to

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the list of pending purchases, which are not yet authorized for delivery. An electronic wallet is used to provide the payment data by generating a Web page with a "Wallet" button and a "Retrieve It" button. When the user clicks on the wallet button, an invoice indicating the amount of the purchase is returned, and displaying to the user a set of selections of different payment forms available to the user, such as electronic cash, check or specific credit card for selection. The consumer clicks a 'Pay' button to consummate the transaction (Col. 17, line 53-Col. 18, line 5). The authorization token is updated to reflect that the voucher packet has been authorized of purchase and download. This technique illustrates *accounting setting means for setting an amount of a fee to be imposed on said terminal apparatus in response to said purchase information*. Wiser does not explicitly teach *accounting setting means does not set said amount of said fee to be imposed on said terminal apparatus when said content ID is placed in said purchase information and said content information corresponding to said content ID stored in said second storage means is accessed by said access control means*. However, as disclosed by Wiser, a media voucher is an object that is used to control the purchase and preview of media data files. For each purchase or preview of a media data file, a new media voucher is created by the content manager and provided to the media player of the user (Col. 8, Lines 19-23). A media voucher includes a unique voucher ID, and a media ID that uniquely identifies the media data file. The voucher ID limits the use of the media voucher to a single purchase or preview transaction (Col. 8, Lines 28-32). A delivery server is responsible for receiving requests from a media player to preview or purchase a media data file containing audio data, and to deliver the requested media data file or

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portion thereof as a preview by real time streaming of the content of the audio data for immediate playback at the media player (Col. 9, Lines 54-67). A purchase request for a specific song is sent to the HTTP server, for example by the user clicking on *Buy It* button (Col. 16, Lines 34-37) and payment is collected (Col. 16, Lines 4-60). As seen, the media ID as *content ID* is placed together with a voucher ID as *purchase information* in a voucher. During a preview, portion of media data file as *content information corresponding to said content ID stored in said second storage means* is accessed for delivering to media player, and obviously, because this is not a purchase, a charge to be imposed on the media player will not be set. In other words, the Wiser technique as discussed indicates *accounting setting means does not set said amount of said fee to be imposed on said terminal apparatus when said content ID is placed in said purchase information and said content information corresponding to said content ID stored in said second storage means is accessed by said access control means*. Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to modify the Wiser system by including the technique of not setting an amount of a fee in order to download information for recording through a data network.

Regarding to claim 37, Wiser teaches all the claimed subject matters as discussed in claim 36, and further discloses: *access control means permits access to said content information corresponding to said content ID stored in said second storage means when said content ID is included in said purchase information* (FIG. 8).

Regarding to claim 39, Wiser teaches all the claimed subject matters as discussed in claim 36, Wiser further discloses: *storage control means stores access history information into said second storage means in response to access to said content information by said access control means, and said accounting setting means sets said amount of said tee to be imposed on said terminal apparatus based on said access history information* (Col. 16, line 26-Col. 18, lines 5).

Regarding to claim 40, Wiser teaches all the claimed subject matters as discussed in claim 36, Wiser further discloses: *distribution apparatus includes said storage control means* (FIG. 1B).

14. Claims 50 and 51 are rejected under 35 U.S.C. 103(a) as being unpatentable over Crawford [USP 5,771,354] in view of Schneider [USP 6,594,675] and Wiser et al. [USP 6,385,596 B1].

Regarding to claim 50, Crawford and Schneider teaches all the claim subject matters as discussed in claim 50, but does not explicitly disclose *information is digital audio data*. Wiser teaches a secure online music distribution system that provides consumers with flexibility and ease of use in the selection, previewing, downloading, and transporting of audio and other digital media over the Internet (Wiser, abstract). Therefore, it would have been obvious for one of ordinary skill in the art at the time the

invention was made to include digital audio data in the technique of Crawford and Schneider in order to transfer audio file.

Regarding to claim 51, Crawford, Schneider and Wiser teaches all the claimed subject matters as discussed in claim 50, Wiser further discloses *digital audio data is compressed data* (Wiser, Col. 7, lines 4-16).

15. Claim 52 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wiser et al. [USP 6,385,596 B1] in view of Inoue [USP 6,567,847 B1].

Regarding to claim 52, Crawford, Schneider and Wiser teaches all the claimed subject matters as discussed in claim 51, but fails to disclose *digital audio data is compressed in an ATRAC format*. Inoue teaches a transmitting and receiving system wherein a data file could be uploaded into a server or download and vice versa and the data is compressed in an ATRAC format (Inoue, Col. 7, line 54-Col. 8, line 6).

Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to modify the Crawford, Schneider and Wiser system by using ATRAC format when upload and download music in order to remotely access and download information for recording through a data network.

Allowable Subject Matter

16. Claims 30, 32 and 33 are allowed.

Regarding to claim 30, 32 and 33, the closest available prior arts, USP 6,385,596 B1 issued to Wiser et al. in combined with USP 5,117,350 issued to Parrish et al. also teaches a terminal apparatus for receiving content information apparatus, however, as in claim 30, Wiser and Parrish fail to teach or suggest the claimed *control means for storing addresses corresponding to said content IDs received from said distribution apparatus into said storage means, said control means stores a logical address corresponding to a predetermined physical address of a storage medium provided in said distribution apparatus at which said content information received in response to said user request by said communication means is stored into said storage means*. Therefore, the invention is allowable over the prior arts of record for being directed to a combination of claimed elements including the providing steps as indicated above.

17. Claims 4, 19 and 48 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Regarding to claims 4, 19 and 48, Crawford and Schneider teaches all the claimed subject matters as discussed in claims 3, 15 and 43, but fails to disclose or

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suggest the claimed *control means searches for a logical address of said management information corresponding to said one or more of said plurality of pieces of content information selected by said selection means, converts said logical address into a physical address of said second storage means and accesses said second storage means based on said physical address* as in claim 4, 19, and *controller searches for a logical address of said management information corresponding to said one or more of said plurality of pieces of content information selected by said selection section, converts said logical address into a physical address of said first storage medium or said second storage medium and accesses said first storage medium or said second storage medium based on said physical address* as in claim 48.


Conclusion

18. Any inquiry concerning this communication or earlier communications from the examiner should be directed to HUNG Q PHAM whose telephone number is 571-272-4040. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, JOHN E BREENE can be reached on 571-272-4107. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Examiner Hung Pham
October 27, 2004


SHAHID ALAM
PRIMARY EXAMINER